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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

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ACCESSION VERSION ' KEYWORDS SOURCE AW036130 538 bp mRNA EST 15-SEP-1999 EST274506 tomato seed, TAMU Lycopersicon esculentum cDNA clone AW036130 AW036130 GI:5894809 EST. tomato.

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Clemson University Genomics Institute
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/cultivar="TA496"
/db_xref="taxon:4081"
/clone="clee1G11"
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/tissue_type="seeds"
/dev_stage="quiescent seed"
/lab_host="XL1-Blue MRF'"
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JOURNAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity
Matches 158; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           source
167
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                                                                                                                                                                                                                         347
                                                                                                                                                                                                                                                                                                407
                                                                                                                                                                                                                                                                                                                                                                          467
                                                                                                                                                                                                                                                                                                                                                                                           531 tgtgctgcttcttgtggtcctggaaacacacacctgattcagggtcttttatgattcgcat 590
                               831 gacgg
                                                                                                          771
                                                                                                                                                 287
                                                                                                                                                                                                                                                             651
                                                                                                                                                                                                                                                                                                                                     591
                                                                       227
                                                                                                                                                                      atggtgaatggtgagcagggtgaacgcattttgcatcacgcgattcagtccaccatg
                                                                                                                                                                                                                                            acgttcttccaggaaacgcatccggagattttgtttaaggaatgctctggttactgcgag
                                                                                                                                                                                                                                                                                                                      cgaaatggtgcgaaggtgttggccatcgctagccatattccgagtgcccagattggttcg 650
GAAGG
                                                                                                                                                                                                                                                                                                                                                                      TGCGCCGGATCGTGCGGCCCCGGCAACCTGCACTTAATCAACGGCCTGTTCGATTGCCAC 408
                                                                     CTTAGCCGTGGCGTTTCGGTTGTCGTGTTACCAGGCGACGTGGCGTTAAAAACCTGCGCCA 168
                                                                                             gcgggtaaaggtgtgtcggttgattgattcctggtgatatcgctaaggaagacgcaggt 830
                                                                                                                                             CTGGTTTCCAGCCCGGAGCAGATCCCACAAGTACTGGCGATTGCCATGCGCAAAGCGGTG
                                                                                                                                                                                                                       GGCTATTTCCAGGAAACCCACCCACAAGAGCTATTCCGCGAATGTAGTCACTATTGCGAG
                                                                                                                                                                                                                                                                                              CGCAATCACGTTCCGGTACTGGCGATTGCCGCTCATATTCCCTCCAGTGAAATTGGCAGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lycopersicon esculentum Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; Asteridae; euasterids
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 (bases 1 to 467)
Alcala,J., Vrebalov,J., White,R., Matern,A.L., Vision,T., Hol
Alcala,J., Upton,J., Ronning,C.M., Craven,M.B., Fujii,C.Y.,
C.L., Nierman,W., Fraser,C.M., Venter,J.C., Martin,G.B., Tar
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Tel: 864 656 4366
Fax: 864 656 4293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: David Frisch
Clemson University Genomics Institute
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Generation of ESTs from tomato seed tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EST
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            EST274505 tomato seed, TAMU Lycopersicon esculentum cDNA clone CLEE1G23 similar to pyruvate oxidase, mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Email: dfrisch@CLEMSON.EDU
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Clemson University
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AW036129.1 GI:5894808
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  C.L., Nierman, W., Fr., S.D. and Giovannoni,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      tomato
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              prime sequence
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Solanales; Solanaceae; Solanum; Lycopersicon.
163
                                                                                                                                                                                                                                                                                                                                                                                                                                                  Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              98
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        /note="Vector: pBlueScript SK(-); Site_1: EcoR1; Sit Xho1; CLEE - Tomato Seed EST Library. Directionally cDNAs inserted into pBlueScript SK(-) at 5' end with EcoRI and 3' end with XhoI site."

134 c 132 g 103 t
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /tissue_type="seeds"
/dev_stage="quiescent seed"
/lab_host="XL1-Blue MRF',"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /clone_lib="tomato seed,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /db_xref="taxon:4081"
/clone="cLEE1G23"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /organism="Lyċopersicon
/cultivar="TA496"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           . .467
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51.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                0; Mismatches 147;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Score 69.8; DB 39
Pred. No. 1.1e-09;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     29634, USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 39;
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, Tanksley
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Holt, I.E.
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OURNAL COMMENT
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ORIGIN
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AUTHORS
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Best Local
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                            481
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                                                              222
                                                                                                                           162 CTCTAAAAACTCAAGATGTGGAGTACATGTTCGGTGTCGTAGGCATCCCCGTGACCGAAA 221
                                                                                                                                             Local Local 151;
                                                    TCGCCCTTGCTGCCCAGGAACTGGGCATCAAGTACATTGGGATGCGGAATGAGCAAGCGG
                                                                             tcgtggatgctgtccgccaatcagatattgagtgggtgcacgttcgaaatgaggaagcgg
c99c9tftgca9cc99t9c9gaatc9tf9atcact999gagct9gca9tat9t9ctgctt 540
                                                                                                                                                                                                                       Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Seq primer: custom primer used High quality sequence stop: 264.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WashU-HHMI Mouse EST Project
Washington University School of MedicineP
4444 Forest Park Parkway, Box 8501, St. L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubu
Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M.,
Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B.,
Theising,B., Wylie,T., Lennon,G., Soares,B., Wilson,R. and
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ue35f02.y1 Sugano mouse liver mlia Mus musculus IMAGE:1482363 5' similar to WP:B0334.3A CE02934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Contact: Marra M/Mouse EST Project
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Possible reversed clone: similarity on
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       The WashU-HHMI Mouse EST Project Unpublished (1996)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Waterston, R
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mus musculus
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                                                                                                                                                                                                                                                                                                                  116
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     clone is available royalty-free through LINL; E Consortium (info@image.llnl.gov) for further j
                                                                                                                                                                                                        Conservative
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314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            mouseest@watson.wustl.edu
                                                                                                                                                                                                                                                                                                           sequencing: 5' end primer CTTCTGCTCTAAAAGCTGCG and 3' primer CGACCTGCAGCACAA."
                                                                                                                                                                                                                                                                                                                                                                                                and cloned into distinct DraIII sites of the pME18S-FL3 vector (5' site CACTGTGTG, 3' site CACCATGTG). XhoI sho be used to isolate the cDNA insert. Size selection was performed to exclude fragments <1.5kb. Library
                                                                                                                                                                                                                                                                                                                                                            constructed by Dr. Sumio Sugano (University of Tokyo Institute of Medical Science). Custom primers for
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        was primed with an oligo(dT) primer [ATCTGGCCTTTTTTTTTTTTTTTTTTTTT]; double-stranded cDNA was [igated to a DrallI adaptor [TGTTGGCCTACTGG], digest
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /note="Organ: liver; Vector: pME18S-FL3;
(CACTGTGTG); Site_2: DraIII (CACCATGTG);
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /dev_stage="adult"
/lab_host="DH10B"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /sex="female"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /clone_lib="Sugano mouse liver mlia"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /db_xref="taxon:10090"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /organism="Mus musculus"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            /clone="IMAGE:1482363"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /strain="C57BL"
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                                                                                                                                                                                                                     2.78;
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                                                                                                                                                                                                      0;
                                                                                                                                                                                                  Score 59.2; DB 16
Pred. No. 1.6e-06;
0; Mismatches 153
                                                                                                                                                                                                                                     DB 16;
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NA clone
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BASE COUNT
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AI931656
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ul71h04.y1
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL; contact the
IMAGE Consortium (info@image.llnl.gov) for further information.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Washington University School of Medicine 4444 Forest Park Parkway, Box 8501, St. Louis, MO 63108, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Contact: Marra M/WashU-NCI Mouse EST Project 1999
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Marra,M., Hiller,L., Kucaba,T., Martin,J., Beck,C., Wylie,T., Underwood,K., Steptoe,M., Theising,B., Allen,M., Bowers,Y., Person,B., Swaller,T., Gibbons,M., Pape,D., Harvey,N., Schurk,R., Ritter,E., Kohn,S., Shin,T., Jackson,Y., Cardenas,M., McCann,R.,
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Mammalia; Eutheria;
1 (bases 1 to 504)
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                                                        314 286 1800
     Institute of Medical Science). Custom primers sequencing: 5' end primer CTTCTGCTCTAAAAGCTGCG primer CGACCTGCAGCTCGAGCACA."

a 114 c 150 g 123 t
                                                                                                                                                                                                                                                                                                                          /strain="C57BL"
/db_xref="taxon:10090"
/clone="IMAGE:2136055"
                                                                                                                                                                                                                                                                                                        /clone_lib="Sugano
                                                                                                                                                                                                                                                        /lab_host="DH10B"
                                                                                                                                                                                                                                                                            'dev_stage="adult"
                                                                                                                                                                                                                                                                                           /sex="female"
                                                                                                                                                                                                                                                                                                                                                                               /organism="Mus musculus"
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Best Local Similarity 49.7
Matches 151; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                      AUTHORS
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AU079796
5', mRNA
                                                                                                                                                                                                                                                                                                                  Contact: Katsuyuki Hashimoto
Division of Genetic Resources
National Institute of Infectious Diseases
23-1, Toyama 1-chome, Shinjuku-ku, Tokyo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       5', mRNA sequence.
AU079796
                                                                                                                                                                                                                                                                                                                                                                           Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                        Hashimoto, K., Kusuda, J., Tanuma, R., J
Suzuki, Y., Sasaki, M. and Sugano, S.
Suzuki, T., Sasaki, M. and Sugano, S.
Isolation of full-length cDNA clones
library made by oligo-capping method
                                                                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus 1 (bases 1 to 827)
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                                                                                                                                                                                                                                                                     http://www.nih.go.jp/yoken/genbank/
Location/Qualifiers
                                                                                                                                                                                                                                                                                                                Toyama 1-chome,
                                                                                                                                                                                                                                                                                                   khashi@nih.go.jp
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sugano mouse brain mncb Mus musculus cDNA clone MNCb-4767
 sites just outside the DraIII sites can be used to isolate the CDM insert. Size selection was performed to exclude fragments 41.5 kb. Library was constructed by Sugano et al. (University of Tokyo, Institute of Medical Science).
                                                         /note="Organ: brain; Vector: pME18S-FL3; 1st strand cDNA was primed with an oligo(dT) primer ATGTGGCCTTTTTTTTTTTTTTTTTTTTTTTTT]; double-stranded cDNA was ligated to a DraiII adaptor [TGTTGGCCTACTGG], digested accloned into distinct DraIII sites of the pME18S-FL3. Xho.
                                                                                                                                                               /clone="MNCb-4767"
/clone_lib="Sugano mouse
/sex="female"
                                                                                                                                                                                                       /strain="C57BL"
/db_xref="taxon:10090"
                                                                                                                                   /dev_stage="adult"
/lab_host="TOP10"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AW217660 539 bp mRNA EST EST296374 tomato flower buds 8 mm to pre-anthesis, University Lycopersicon esculentum cDNA clone cTOC
                                                                                                                                                                                                                      100 Jordan Hall, (Tel: 864 656 4366 Fax: 864 656 4293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AW217660.1 GI:6528534
EST.
                                                                                                                                                                                                                                                                               Clemson University
                                                                                                                                                                                                                                                                                                     Clemson University Genomics Institute
                                                                                                                                                                                                                                                                                                                                         Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Spe
Magnoliophyta; eudicotyledons; core eudicots; Asteridae;
I; Solanales; Solanaceae; Solanum; Lycopersicon.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          University Lycopersicon esculentum cDNA clone cTOC1K5 similar Nicotiana tabacum acetolactate synthase, mRNA sequence.
                                                                                                                                                                                                 Email: dfrisch@CLEMSON.EDU
                                                                                                                                                                                                                                                                                                                          Contact: David Frisch
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                                                                                                                                                                                 sequence.
/clone_lib="tomato flower
Cornell University"
/tissue_type="flower"
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                                                        /db_xref="taxon:4081"
/clone="cTOC1K5"
                                                                                                 /organism="Lycopersicon
/cultivar="TA496"
                                                                                                                                                            ocation/Qualifiers
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hes 121;
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                                                                                                                                                                                                                                                   High quality sequence stop: 649.
                                                                                                                                                                                                                                                                           http://image.llnl.gov
Plate: LLAM8539 row:
                                                                                                                                                                                                                                                                                                     DNA Sequencing by: Incyte Genomics, Inc. Clone distribution: MGC clone distribution information can found through the I.M.A.G.E. Consortium/ILNL at:
                                                                                                                                                                                                                                                                                                                                                                                                  Email: Robert_Strausberg@nih.gov
Tissue Procurement: Gilbert Smith,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         NIH-MGC http://www.ncbi.nlm.nih.gov/MGC/National Institutes of Health, Mammalian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae;
                                                                                                                                                                                                                                                                                                                                                                                                                                        Contact: Robert Strausberg, Ph.D. Tel: (301) 496-1550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              BE282914
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601100571F1 NCI_CGAP_Lu29 Mu:
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                                                                                                                                                                                                                                                                       LLAM8539 row: n
/note="Organ: lung; Vector: pCMV-SPORT6; Site_1: Sal1; Site_2: NoL1; Cloned unidirectionally. Primer: Oligo Library constructed by Life Technologies. Investigator providing samples: Gilbert Smith, NIH"
                                                                                          /tissue_type="spontaneous
Stem cell origin."
                                                                           /lab_host="DH10B"
                                                                                                                                                                  /strain="CZECH II (feral)"
/db_xref="taxon:10090"
                                                                                                                              /clone_lib="NCI_CGAP_Lu29"
                                                                                                                                               /clone="IMAGE:3493073"
                                                                                                                                                                                                     ∕organism="Mus musculus"
                                                                                                                                                                                                                                           Locati
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /dev_stage="buds 8mm-to-preanthesis"
/note="Vector: pBlueScript SK(-); Site_1: EcoR1; Sit
Xhol; supplier: Tanksley; Flower buds and flowers w
taken from greenhouse plants (4-8 wks old, TA496). I
were immediately frozen in liquid nitrogen and then
size-separated while remaining frozen."
a 92 c 148 g 175 t
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Pred. No. 3.9e
0; Mismatches
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cches 105;
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Murinae; Mus
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                                                                                                                                                                                                                                 JOURNAL
                                                                                                                                                                                                                                                  TITLE
                                                                                                                                                                                                                                                                                                                   AUTHORS
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Best Local
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    AA289922
vb14g01.rl :
similar to !
                                                                                                       Email: mouseest@watson.wustl.edu
This clone is available royalty-free
IMAGE Consortium (info@image.llnl.gov
                                                                                                                                                                          Washington University School of MedicineP
                                                                                                                                                                                                     Unpublished (1996)
Contact: Marra M/Mouse EST Project
WashU-HHMI Mouse EST Project
                                                                                                                                                                                                                                                                                 Marra,M., Hillier,L., Allen,M., Bowles,M., Dietrich,N., Dubu
Geisel,S., Kucaba,T., Lacy,M., Le,M., Martin,J., Morris,M.,
Schellenberg,K., Steptoe,M., Tan,F., Underwood,K., Moore,B.,
                                                                                                                                                                                                                                              The WashU-HHMI Mouse
                                                                                                MGI:457928
                                                                                                                                      Email:
                                                                                                                                                    Fax: 314 286 1810
                                                                                                                                                                                                                                                            Waterston, R.
                                                                                                                                                                                                                                                                      Theising, B., Wylie, T., Lennon, G.,
                                                                                                                                                                                                                                                                                                                                              Mammalia;
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AA289922
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/organism="Mus musculus"
/db_xref="taxon:10090"
/clone="IMAGE:748944"
                                                    Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                      ; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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WP:B0334.3A CE02934
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Pred No 6e-0
0; Mismatches
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OXALYL-COA DECARBOXYLASE ;, mRNA
                                                                                Amersham
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                                                                                                                                                                                                                                                                       Soares, B.,
                                                                                                                     through LLNL ;
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                                                                                                       information
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                                                                                                                                                                                                                                                                                                                                                                                                                                                              IMAGE: 748944
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/clone_lib="Soares mouse
/tissue_type="Liver"

NML "

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REFERENCE
AUTHORS
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AI573836
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOURCE
ORGANISM
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                                                                                                                                                                                                                           Contact: Marra M/WashU-NCI Mouse EST Project 1999 Washington University School of Medicine 4444 Forest Park Parkway, Box 8501, St. Louis, MO Tel: 314 286 1800 Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                            1 (bases 1 to 571)
Marra, M., Hiller, L., Kucaba, T., Martin, J., Beck, C., Wylle, T.,
Underwood, K., Steptoe, M., Theising, B., Allen, M., Bowers, Y., Person
, B., Swaller, T., Gibbons, M., Pape, D., Harvey, N., Schurk, R., Ritter
, E., Kohn, S., Shin, T., Jackson, Y., Cardenas, M., McCann, R.,
Waterston, R. and Wilson, R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AI573836 571 bp mRNA EST 29-MAR-19 uj66d09.y1 Sugano mouse liver mlia Mus musculus cDNA clone IMAGE:1924913 5' similar to WP:B0334.3A CE02934 ;, mRNA sec
                                                                                                                                                                                       Email: mouseest@watson.wustl.edu
This clone is available royalty-free through LLNL ;
                                                                                                                                                                                                                                                                                                                            Unpublished (1999)
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/db_xref="taxon:10090"
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                                                                                                      Tissue Procurement: Lothar Hennighausen Ph.D., Chu-Xia Deng Ph.D. CDNA Library Preparation: Life Technologies, Inc. CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL) DNA Sequencing by: Washington University Genome Sequencing Center Clone distribution: NCI-CGAP clone distribution information can be found through the I.M.A.G.E. Consortium/LLNL at:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AW763503 451 bp mRNA EST 04-MAY-2000 ur62c01.y1 NCI_CGAP_Mam3: Mus musculus cDNA clone IMAGE:3154848 similar to WP:B0334.3A CE19658; mRNA sequence.
                                                                                                                                                                                                                                                                                                                                                                              Contact: Robert Strausberg, Ph.D. Tel: (301) 496-1550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; 1 (bases 1 to 451)
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132 c 162 g 137 t 1 others
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EST282841 tomato callus,
CLEC3316, mRNA sequence.
AW035982
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               Clemson University Genomics Institute Clemson University
                                                                       Alcala,J., Vrebalov,J., White,R., Matern,A.L., Vision,T., Holt,I., Liang,F., Upton,J., Craven,M.B., Bowman,C.L., Ahn,S., Ronning,C.M., Fraser,C.M., Martin,G.B., Tanksley,S.D. and Giovannoni,J. Generation of ESTs from tomato callus tissue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           149;
                                                Unpublished (1999)
Contact: David Frisch
                                                                                                                                             Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Spe:
Magnoliophyta; eudicotyledons; core eudicots; Asteridae;
I Solanales; Solanaceae; Solanum; Lycopersicon.
                                                                                                                                                                                              Lycopersicon esculentum
                                                                                                                                                                                                                              EST
                                                                                                                                                                                                                                          AW035982.1 GI:5894738
                                                                                                                                                                                                                tomato
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Location/Qualifiers
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                                                                                                                                                                                                                                                                                 612 bp
tomato callus,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /dev_stage="10 months"
/lab_host="DH10B"
/not=="^~~~
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/clone="IMAGE:3154848"
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/strain="129 - C57/B6 -
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0; Mismatches
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Pred. No. 5e-05;
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    SC 29634, USA
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dae; euasterids
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FEATURES
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Query Match
Best Local Similarity
Matches 118; Conserv
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1 (bases 1 to 604)
van der Hoeven, R.S., Bezzeredes, J.L., Matern, A.L., Holt, I.E., F., Hansen, T.S., Craven, M.B., Bowman, C.L., Ronning, C.M., Nie, W., Fraser, C.M., Martin, G.B., Giovannoni, J.J. and Tanksley, S. (S. Comeration of ESTs from tomato flower tissue, anthesis
                                                                                        Clemson University
100 Jordan Hall, Cl
                                                                                                                           Clemson University Genomics Institute
5. prime sequence.
                                                                                                                                                                                                                                                                                                      Lycopersicon esculentum
Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Spermatophyta;
Magnoliophyta; eudicotyledons; core eudicots; Asteridae; euasterids
I; Solanales; Solanaceae; Solanum; Lycopersicon.
                                              Tel: 864 656 4366
Fax: 864 656 4293
                                                                                                                                                          Contact: David Frisch
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EST339015 tomato flower
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Fax: 864 656 4293
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                       dfrisch@CLEMSON.EDU
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /tissue_type="callus"
/dev_stage="25-40 days old'
/lab_host="XL1-Blue MRF'"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /clone_lib="tomato callus,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             /clone="cLEC33L8"
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buds,
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RESULT 13
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Best Local Similarity 51.8
                                                                                                                                                                                                                                                  TITLE
JOURNAL
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EST275051 tomato callus,
CLEC18E17, mRNA sequence
                                                                                                                                                                                                                                                              Alcala, J., Vrebalov, J., White, R., Matern, A.L., Vision, T., Holt, I.E., Liang, F., Upton, J., Craven, M.B., Bowman, C.L., Ahn, S., Ronning, C.M., Fraser, C.M., Marth, G.B., Tanksley, S.D. and Giovannoni, J. Generation of ESTs from tomato callus tissue
                                                                                                                                                                                                              Clemson University Genomics Institute
                                                                                                                                                                                                                                    Contact: David Frisch
                                                                                                                                                                                                                                                 Unpublished (1999)
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I; Solanales; Solanaceae; Solanum; Lycopersicon.
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00 Jordan Hall, Clemson,
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864 656 4293
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/db_xref="taxon:4081"
/clone="cLEC18E17"
/clone_lib="tomato callus,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1..604
/organism="Lycopersicon esculentum"
/cultivar="TA496"
/db_xref="taxon:4081"
/clone="cTOD3N19"
/clone=lib="tomato flower buds, ant
                                                 /organism="Lycopersicon
/cultivar="TA496"
                                                                                                  Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /tissue_type="flower"
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Pred. No. 0.00033;
0; Mismatches 109;
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RESULT 1
AW033050
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SOURCE
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ORIGIN
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Best Local Similarity
Matches 117; Conserv
                                                                                                                                                                                                                                                                                                                                                                                                                TITLE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  AUTHORS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               374 TATTCGTAATGTGCTGCCACGTCATGAACAGGGTGGTGTGTTTGCTGCAGAGGGTTACGC 433
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              tattccgagtgcccagattggttcgacgttcttccaggaaacgcat
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    galtcagggtcittatgaltcgcaltcgaaatggtgcgaaggtgttggccaltcgclagcca 625
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       AGTGCCGAGGAGGATGATTGGTACTGATGCGTTTCAAGAAACTCCT
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EST276609
CLEC21L2,
                                                                                                                                                                                                                                                                                                                                                                                                         Alcala,J., Vrebalov,J., White,R., Matern,A.L., Vision,T., Holt,I.E., Liang,F., Upton,J., Craven,M.B., Bowman,C.L., Ahn,S., Ronning,C.M., Fraser,C.M., Martin,G.B., Tanksley,S.D. and Glovannoni,J. (Generation of ESTs from tomato callus tissue
                                                                                                                                                                                                                                                                                                                                               Clemson University Genomics Institute
                                                                                                                                                                                                                                                                                                                                                                        Contact: David Frisch
                                                                                                                                                                                                                                                                                                                                                                                       Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Lycopersicon escuterum Embryophyta; Tracheophyta; Spermatophyta; Eukaryota; Viridiplantae; Embryophyta; Tracheophyta; Spermatophyta; magnoliophyta; eudicotyledons; core eudicots; Asteridae; euasterids; Solanales; Solanaceae; Solanum; Lycopersicon.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Lycopersicon esculentum
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EST
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                                                                                                                                                                                                                                                                                                                           lemson University
                                                                                                                                                                                                                   prime
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864 656 4293
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                                                                                                                                                                                                                                       dfrisch@CLEMSON.EDU
                                                                                                                                                                                                                   sequence
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/tissue_type="callus"
/dev_stage="25-40 days old"
/lab_host="XL1-Blue MRF'"
                                                                                     /db_xref="taxon:4081"
/clone="cLEC21L2"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /dev_stage="25-40 days old"
/lab_host="XL1-Blue MRF'"
                                                               /clone_lib="tomato callus,
                                                                                                                              /organism="Lycopersicon
/cultivar="TA496"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   mRNA sequence.
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                                                                                                                                                                                          ocation/Qualifiers
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                                                                                                                                                                                                                                                                                                  Člemson, SC<sup>1</sup> 29634, USA
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Pred. No. 0.00034;
0; Mismatches 109;
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/note="Yector: pBlueScript.SK(-); Site_1: EcoR1; Site_2: Khol; supplier: Glovannoni laboratory; cLEC - Cotyledons

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REFERENCE
AUTHORS
                                                                                                                                         FEATURES
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ORIGIN
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Best Local Similarity
Matches 117; Conserv
                                                                                                                source
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   626 tattccgagtgcccagattggttcgacgttcttccaggaaacgcat 671
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      446 tattgagtgggtgcacgttcgaaatgaggaagcggcggcggtttgcagccggtgcggaatc 505
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           AGTGCCGAGGAGGATGATTGGTACTGATGCGTTTCACGAAACTCCT
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                                                                                                                                                   below when ordering this clone: Source Seq primer: -40RP from Gibco High quality sequence stop: 396.
                                                                                                                                                                                                                      Library constructed by Bruce Blumberg
Library normalized by Jihwan Song
DNA Sequencing by: Washington University Genome Sequencing Center
Clone distribution: Xenopus clone distribution information for
this library can be found through Research Genetics, visit their
web page at: http://www.resgen.com/ Please reference the id listed
                                                                                                                                                                                                                                                                                                                                                                                                                          WashU Xenopus EST project, 1999
Washington University School of Medicine
4444 Forest Park Parkway, Box 8501, St. 1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WashU Xenopus EST project, 1999
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Clifton,S., Johnson,S.L., Blumberg,B., Song,J., Hillier,L., Pape,D., Martin,J., Wylie,T., Underwood,K., Theising,B., Bowers,Y., Person,B., Gibbons,M., Harvey,N., Ritter,E., Jackson,Y., McCann,R., Waterston,R. and Wilson,R.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        BE681144 EST 11-SEP-2000 d906d12.yl Xenopus laevis gastrula non normalized Xenopus laevis cDNA clone XENOPUS_SOURCE_ID:xlnnga002n24 5'.similar to WP:B0334
                                                                                                                                                                                                                                                                                                                                                                                     Tel: 314 286 1800
Fax: 314 286 1810
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Contact: Sandy Clifton, Ph.D.
                                                                                                                                                                                                                                                                                                                                                                Email: est@watson.wustl.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Xenopus laevis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CE19658 ;, mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      African clawed frog.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            þ
/clone="XENOPUS_SOURCE_ID:xlnnga002n24"
/clone_lib="Xenopus laevis gastrula non
/tlssue_type="gastrula (stages 10.5, 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              of seedlings 7-10 days post-germination were excised, cut at both ends and placed on MS medium with no selection. Mixed callus was harvested at 25 and 40 days and included undifferentiated masses. Tomato Callus EST Library" a. 154 c 148 g 189 t
                                                                   /organism="Xenopus laevis"
/db_xref="taxon:8355"
                                                                                                                                  Location/Qualifiers
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51.8%;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 51.6; DB 39;
Pred. No. 0.00034;
0; Mismatches 109;
                                                                                                                                                                                                 wase reference the id listed lab clone id - xlnnga002n24
                                                                                                                                                                                                                                                                                                                                                                                                                             Louis, MO 63108, USA
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Query Match
Best Local Similarity
                                                                                                                                                            371 tcaaggtgtgaagcgaatttatggtttggtgggtgacagccttaatccgatcgtggatgc 430
                                                                                                                                                                                                                                                                                             76 ACAAAATGTAAAGTATATGTTTGGCATAGTTGGAATCCCTGTCATTGAAATAGCTGTGGC 135
                                                                                                                                                                                                                                        16 AGGCTGCGAGGAGCAGGAACCTGTCACTGGAGCACAAATCATTGCAGAGGCGCCTAGTCGC 75
                                     tgtccgccaatcagatattgagtgggtgcacgttcgaaatgaggaagcggcggcgtttgc 490
   TGCGCAGGCTGCTGGGATCAAGTATGTGGGGGATGAGAAATGAACAAGCGGCTTGCTATGC
                                                                                                                                                                                                                                                                                                                                                                         125;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     136 a
                                                                                                                                                                                                                                                                                                                                                                     Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /lab_host="Top-10 F'"
/note="Vector: pBluescript SK-; Site_1: EcoRT; Site_2: XhoI; CDNA was prepared from 2ug of poly A+ RNA (equal parts from stage 10.5 and stage 11.5 gastrulae).
EcoRI-xhoI cut cDNA was then ligated into UniZap-XR (Stratagene) with EcoRI at the 5' end and XhoI at the end. SS-library phagemids were prepared by mass excision from the original library and normalized by hybridization to biotinylated driver (prepared from the same library by PCR) to Cot-omega of 11. After removal of hybrids and excess driver by streptavidin sepharose chromatography, the Ss-phagemids were made double stranded and electroporated into Top-10 F'. Original library contruction by Bruce Blumberg (Cho et al. 1991 Cell 67, 1111-1120). Note: This is a Xenopus Gene Collection (XGC) library."
                                                                                                                                                                                                                                                                                                                                                                                               2.4%;
                                                                                                                                                                                                                                                                                                                                                                     0;
                                                                                                                                                                                                                                                                                                                                                         Score 51.2; DB 111; Length 523; Pred. No. 0.00041; 0; Mismatches 123; Indels 0;
                                                                                                                                                                                                                                                                                                                                                               0,;
                                                                                                                                                                                                                                                                                                                                                            Gaps
195
                                                                                                                                                                                                                                                                                                                                                            0;
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BASE COUNT

Matches

Search completed: March 17, Job time: 1625 sec 2001, 20:25:48 QΥ Дb Qy В Qy Дb

tggaaaca 558

196

136 431

491 agccggtgcggaatcgttgatcactggggagctggcagtatgtgctgcttcttgtggtcc

AGCCTCTGCTGGGCTATCTAACTGGCAGGCCAGGAGTATGTCTTGTTGTCTCTGGACC

Qy В QY

Вb

256 AGGCCTCA 263